DisplayPort Chainable Extender over CAT5e/6

User's Manual

Version 1.0

1. Introduction

Thanks for purchasing the **DisplayPort Chainable Extender** over CAT.5e/6. We recommend that you read this manual thoroughly and retain for future reference.

Features

DisplayPort Chainable Extender over CAT.5e/6 is the latest high performance, cost-effective DisplayPort Daisy-Chainable Extender, which allows you to extend video and audio up to 100 meters distance between source or computer and monitor or projector. With the built-in video and audio signals enhancement, you can gain the best video resolution quality and audio stereo sound while listening, and no any additional software needed. Besides, the installation and operation are easily more than expected. With using in extension facilities of video and audio, this product, the DisplayPort Chainable Extender over CAT.5e/6, delivers worthy of performing efficiency and value-added.

- With Expandable Receiver, each Receiver Unit with cascade function enables to link the
 other two (2) Receiver Units consecutively extending another 100m distance, and continue
 expanding corresponding to custom demand as likely Cascade/Tree Chain web architecture
 spread.
- Uses easy to install, inexpensive CAT. 5e/6 cables.
- Each pair (TX & RX) extends the signals up to 100m (330 feet).
- Supports video high resolution up to 1920x1080@60Hz, Full HD 1080p.
- HDTV compatible (720p, 1080i, 1080p).
- Supports Stereo 2.0
- Cascaded-chainable receiver up to 10 layers.
- Supports RS-232 (Serial).
- IR (Infrared remote) enabled.
- Support Local HDMI monitoring port.
- Each receiver (remote) links cascade-chainable 2 receivers.
- Rack mountable.

Package Contents

- 1. DisplayPort Extender Transmitter x 1
- 2. DisplayPort Extender Receiver x 1
- 3. Power Adaptor DC 5V x 2 (set units) or 1 (single unit)
- 4. User's Manual x 1

Specification

			Transmitter	Receiver	
Console	DisplayPor	t Output	DisplayPort (Female)	DisplayPort (Female)	
Connectors	RS-232 Control Port		Phone Jack	Phone Jack	
PC Connectors	DisplayPort Input		DisplayPort (Female)	N/A	
Extension Port	RJ-45		Full HD Video / Audio Extension		
RJ-45			1 (Line Out)	3 (Line In or Line Out)	
Cascaded-Chainable			N/A	up to 10 layers	
Audio			Supports High Definition Audio (HD), Surround Sound		
IR			Uni-directional (from RX to TX)		
RS-232			Bi-directional		
LED Indicators	Local	Power	Red LED		
		Link	Red Green		
	Remote	Power	Red LED		
		Link	Red Green		
DDC Supported			DDC, DDC2, DDC2B		
Extension Cable Type & Length			CAT.5e / CAT.6 Max. Length: 100m		
Max. Video Resolution			1920x1080@60Hz, Full HD 1080p, 48-bit		
Wide Screen Supported			Yes		
OS Compatibility			Windows, Mac, Linux, Sunmicro systems		
Power Supply			External DC 5V / 2A Power Adapter		
Dimension (L x W x H)			115 x 91 x 28 mm		
Weight			340g	380g	
Housing material			Metal		
Operating Temperature			32 - 122°F (0 - 50°C)		
Humidity			0% - 80% RH		

2. Detail and Diagram

Detail Picture



Transmitter (TX)-Front



- ①: Connected to Power Adapter DC 5V/2A
- 2: Power LED (Solid Red when power present)
- 3: Link LED (Solid Green when link present)
- 4: DisplayPort In, connected to DisplayPort source
- 5: DisplayPort Out, connected to local Monitor

Transmitter (TX)-Rear



- **6:** Audio Out, connect to speaker
- ②: Cat.5e/6 cable connected for data out
- **8:** IR Blaster /Emitter
- 9: RS-232 control port
- **10:** Reset Button

Receiver (RX)-Front



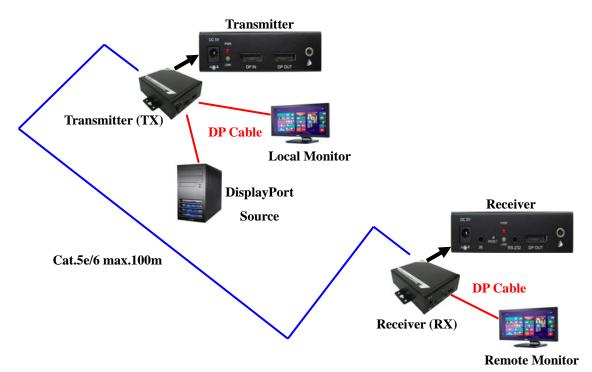
- ①: Connected to Power Adapter DC 5V/2A
- 2: IR Receiver
- 3: Reset Button
- **4:** Power LED (Solid Red when power present)
- **⑤:** Link LED (Solid Green when link present)

Receiver (RX)-Rear



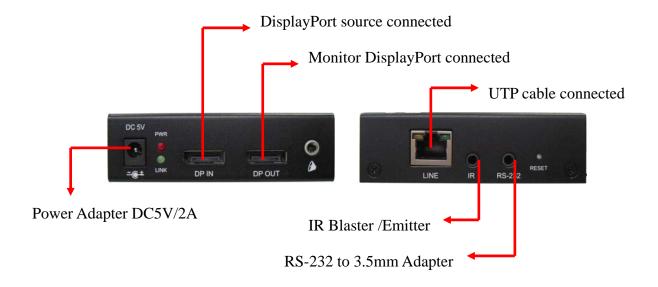
- **6**: RS-232 control port
- ②: DisplayPort Out, connected to remote Display
- **8:** Audio Out, connect to speaker
- **9:** CAT.5e/6 cable connected for data in or out for either one, or another 2 x Receivers connected for expanded chaining link.

Application Diagram



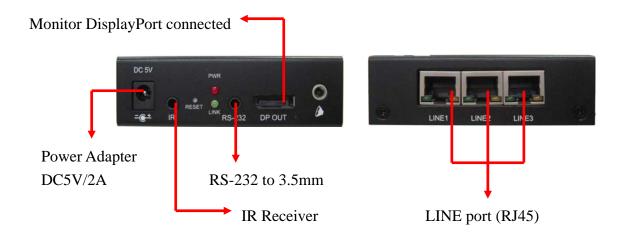
Transmitter Installation

- UTP Cable connected with Transmitter to get the best display quality, please use CAT.5e/6 Cable, and the cable connector node is to connect to Transmitter **LINE port (RJ45)**
- Connect the IR Blaster Emitter cable or RS-232 to 3.5mm adapter to the Transmitter Unit IR Port or RS-232 control port if necessary.
- Connects Transmitter with DisplayPort cable to DisplayPort connector of DisplayPort source.
- Connects Transmitter with DisplayPort cable to DisplayPort connector of Display Monitor if necessary.
- Plug DC 5V/2A power adapter.



Receiver Installation

- UTP Cable connected with Receiver to get the best display quality, please use CAT.5e Cable, and the cable connector node is to connect to Receiver LINE1 or LINE2 or LINE3 port (RJ45)
- Connect the IR Receiver cable or RS-232 to 3.5mm adapter to the Receiver Unit IR Port or RS-232 port if necessary.
- Connect Receiver with DisplayPort cable to DisplayPort connector of Display Monitor.
- Plug DC 5V/2A power adapter.

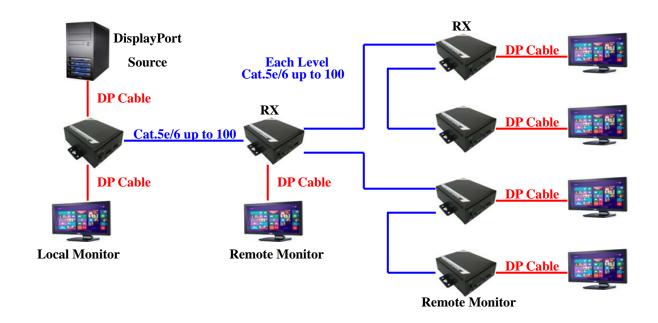


Cascade Chain Connection

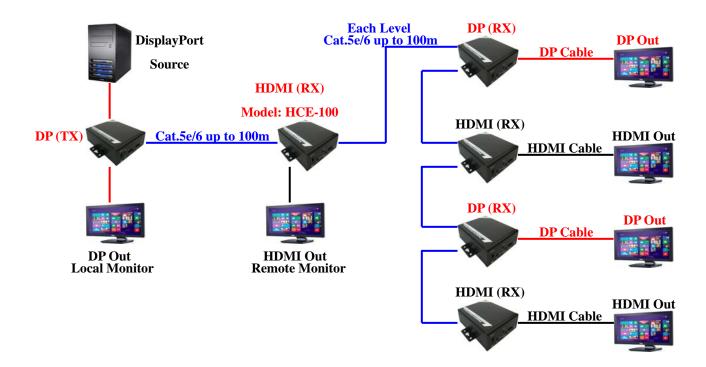
- Use UTP Cable connected with Receiver to link the other two (2) Receiver Units consecutively to extend another 100m distance, the cable connector node is to connect to Receiver LINE1 or LINE2 or LINE3 port (RJ45), as long as the LINE port is not occupied, and user can continue expanding corresponding to custom demand as likely Cascade/Tree Chain web architecture spread.
- Connect the IR Receiver cable or RS-232 to 3.5mm adapter to the Receiver Unit IR Port or RS-232 port if necessary.
- Connect Receiver with DisplayPort cable to DisplayPort connector of Display Monitor.
- Plug DC 5V/2A power adapter.

Each Receiver with three (3) Line port, one is used for source input, and the other two are used for expanding source to other receivers. User can choose any LINE port as source input at random, and use the other two LINE port for expanding source to next tier receiver as long as the LINE port is not occupied.

Cascaded Chain Diagram

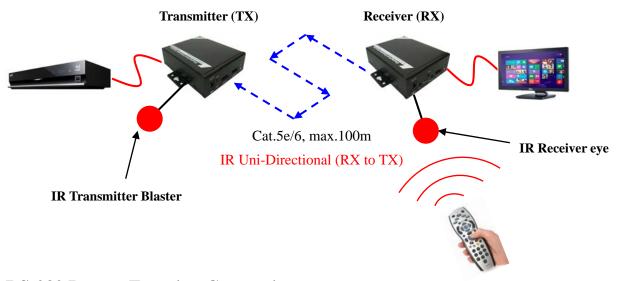


Cascaded and Compatible with HDMI receiver



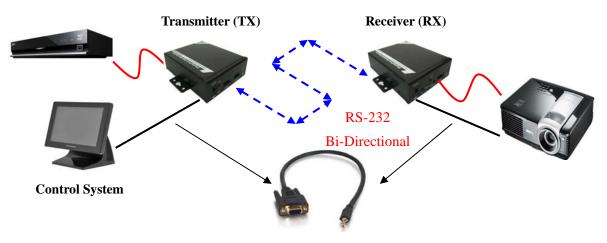
IR Bypass Function Connection

- Connect the IR Transmitter (or Emitter) cable to the IR Connector on the DisplayPort Transmitter Unit (TX)
- Connect the IR Receiver cable to the IR Connector on the DisplayPort Receiver Unit (RX)
- Place the IR Eye of the IR Receiver cable near the Remote Controller
- Place the IR Blaster of the IR Transmitter cable near the device that intend to be controlled by the Remoter controller



RS-232 Bypass Function Connection

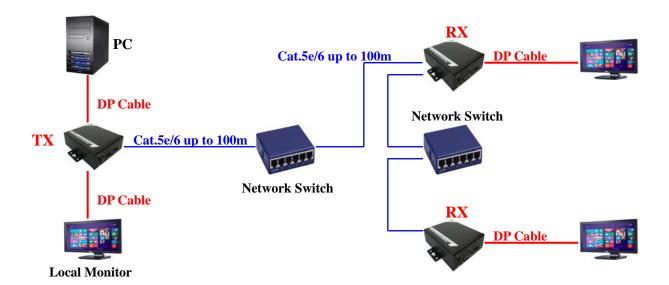
- Connect the device, such as a PC, projector...etc, to the RS-232 port of the DisplayPort Transmitter Unit or DisplayPort Receiver Unit via a RS-232 to 3.5mm adatper
- Connect the controlling device to the RS-232 port of the HDMI Receiver Unit or HDMI Receiver Unit via a RS-232 to 3.5mm adapter
- Operating the control system



RS-232 to 3.5mm

Hub Extend Function Connection

- The maximum distance between each tier could be up to 100 meters long, while this could be extended through Network Switch. User can add one Network Switch to extend another 100 meters.
- The more Network Switches, the longer distance extended. The number of Network Switches is as many as user want.



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FCC Statement

This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CE / FCC

